

**Abstract**

A prosthesis assembly replaces all or a portion of a caudal portion of a left natural facet joint (i.e., a left superior articular process) and all or a portion of a caudal portion of a right natural facet joint (i.e., a right superior articular process) on a vertebral body. The prosthesis assembly has a left prosthesis body accommodating fixation to the vertebral body at or near a left pedicle and without support by a lamina. An artificial left facet joint structure is carried by the left prosthesis body and is adapted and configured to replace all or a portion of a caudal portion of the left natural facet joint. The prosthesis assembly also has a right prosthesis body accommodating fixation to the vertebral body at or near a right pedicle and without support by a lamina. An artificial right facet joint structure is carried by the right prosthesis body and is adapted and configured to replace all or a portion of a caudal portion of the left natural facet joint.